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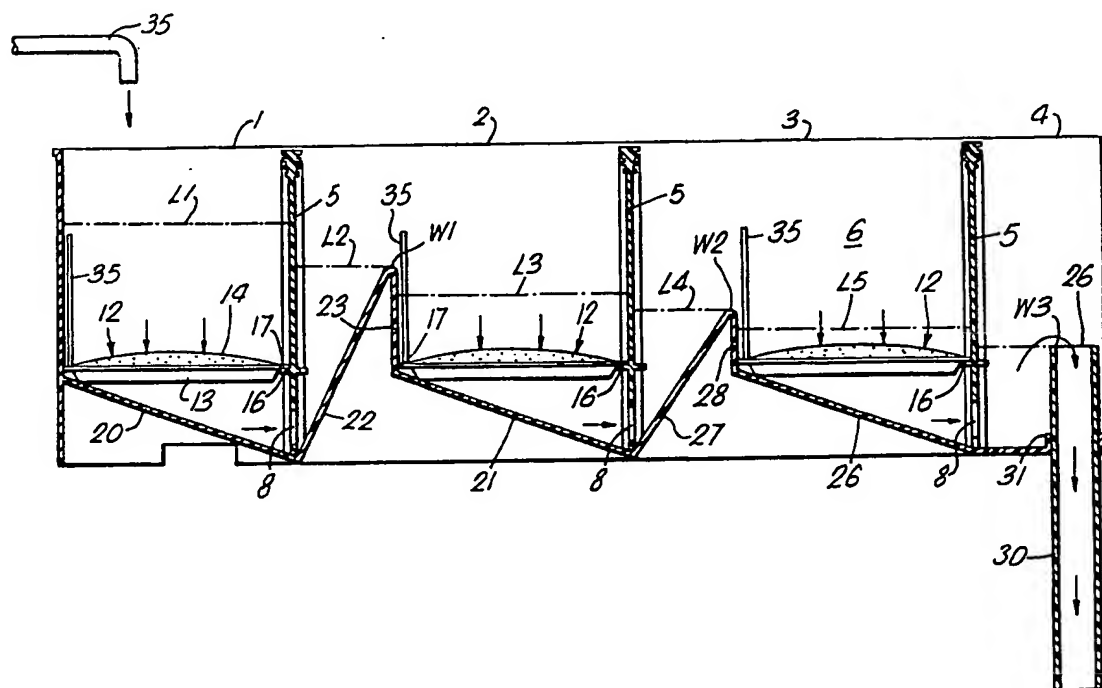
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(54) Aquarium filter

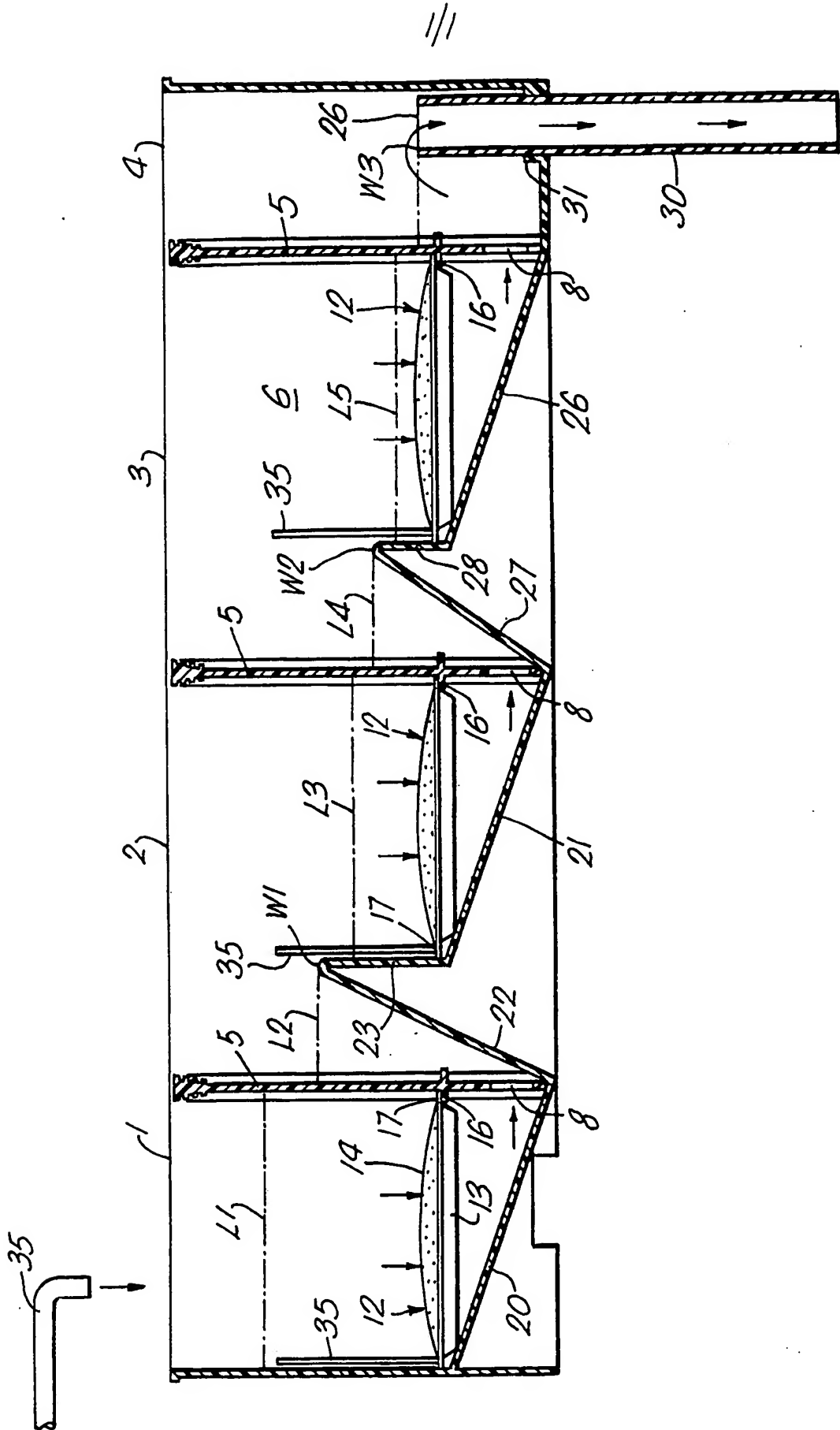
(57) A filtration tank 1 with inlet 35 is divided into four compartments 1, 2, 3 and 4 by removable partitions 5. Each compartment includes a filter 12 supported at 16 on a respective partition 5 and at the other end by the tank floor which also defines two weirs W1 and W2. These weirs, and a third weir W3 defined by the top of a removable rectangular outlet tube 30, maintain water levels above the respective filters and ensure uniform flow therethrough. Each partition 5 is formed at the bottom with holes 8 for the flow of water from one compartment to the next and at the top with small holes which permit, overflow if the filter becomes clogged, indicating that the filter needs changing. Each filter 12 comprises a perforated plastics tray 13 holding granulated carbon enclosed by a layer of plastics foam and floss 14 and has a strip 35 enabling the filter to be lifted from the compartment.



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WATER FILTRATION APPARATUS

According to the present invention, a filtration device for this purpose comprises a tank divided into at least two compartments by a partition which is perforated towards the lower edge to permit flow from one compartment to the other, the first compartment having supports for a generally horizontal filter element and the second compartment including a weir extending to a level above that of the filter element in the first compartment so that, during operation, when water flows into the first compartment and through the filter element the water level will rise to that of the weir and the filter element will be completely submerged. Water from the fish tank is directed into the first compartment and since the filter in that compartment is completely submerged, the in-flowing water does not strike the

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If, however, the over-flowing water is not noticed and the filter is not changed, the second compartment will fill up quite rapidly until the water starts to over-flow through the small holes at the top of the next partition into the third compartment. If this is still not noticed, the water will eventually over-flow into the fourth compartment and then run away through the outlet pipe 30. In other words, the indication that a filter change is necessary occurs in three stages. As already mentioned, the first filter separates a large proportion of the dirt from the water and will require changing most frequently. However, the second filter will ultimately become clogged and a similar warning will be given that it is necessary for it to be changed.

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CLAIMS

1. A filtration device for the continuous filtration of water from a fish tank comprising a tank divided into at least two compartments by a partition which is perforated towards its lower edge to permit flow from one compartment to the other, the first compartment having supports for a generally horizontal filter element and the second compartment including a weir extending to a level above that of the filter element in the first compartment so that during operation, when water flows into the first compartment and through the filter element, the water level will rise to that of the weir and the filter element will be completely submerged.

2. A filtration device according to claim 1, in which the filtration tank includes one or two additional compartments, each with its own generally horizontal filter, the additional partitions being perforated towards their lower edges and weirs being provided to ensure that each successive filter is completely submerged so that the flow is even and dead spots are avoided in operation.

3. A filtration device according to claim 2, in which there are four compartments, the first three of which are fitted with filters and the fourth of which includes a weir and an outlet for the filtered water.

4. A filtration unit according to any one of the preceding claims in which the partition or partitions is or are readily removable.

30 5. A filtration unit according to any one of the preceding claims in which each filter is provided with a handling strip.

6. A filtration unit according to any one of the preceding claims in which each filter comprises a

perforated plastics tray containing granulated carbon enclosed by a layer of plastics foam.

7. A filtration device for the continuous filtration of water from a fish tank substantially as described and as illustrated in the accompanying drawing.

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